

Remarks/Arguments

In response to the Office Action dated February 23, 2005 Claims 94 to 116 have been amended as set out in the Listing of Claims enclosed herewith. Care has been taken to avoid the introduction of new matter and basis for the amendments made is set out below. Favourable reconsideration of this application as now amended is respectfully solicited. The paragraph numbering below refers to the Office Action of February 23, 2005.

Paragraph 2:

The Examiner's acknowledgement that the arguments filed by the applicant are sufficient to overcome the rejection under 35 U.S.C. §103(a) over IE970208 alone, as applied to Claims 94-110 & 116 is noted gratefully.

Paragraph 4:

Claims 94-101, 103, 109 & 111-116 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention.

- A) The Examiner's objection has been overcome by the amendment of Claim 94 to specify that the components are provided in the proportions specified by weight of the feedstock.
- B) The Examiner's objection to the term "substantially without melting" in Claim 116 has been overcome by amending the claim to specify that the bulk of the polymer granules do

not liquefy. Support for this amendment can be found on Page 4 Line 5 of the application as filed.

The Examiner's acknowledgement in the Advisory Action of October 18, 2004 that the rejection under 35 U.S.C. §112, second paragraph of Claims 97 and 109 was overcome by the applicant's reply filed October 5, 2005 is gratefully acknowledged.

Paragraph 6:

Claims 94-116 are rejected under 35 U.S.C. 103(a) as being unpatentable over IE970280 in combination with Giltsoft (US5,948,848) and further in combination with WO98/26911.

The Examiner's objection is in part respectfully traversed by the arguments set out below and in part overcome by the amendments made to Claim 94. Claim 94 has been amended to specify that the composition comprises 5-50% of a solid particulate filler. Support for this amendment can be found on Page 5 Lines 23-26 of the application.

It is noted with appreciation that the Examiner recognizes on Page 4 of the present Office Action that IE970,280 (IE '280) does not disclose the addition of a filler component to the PVA compositions disclosed. Further, there is no suggestion or motivation in IE '280 to modify the disclosed compositions to add a filler component.

It is further submitted that a combination of IE '280 and US5,948,848 (Giltsoft) would not lead one of ordinary skill in the art to the composition claimed in the present application.

Neither Giltsoft nor IE '280 teaches or discloses a PVA composition having the combination of components in the proportions specified in the claims of the present application. In particular, although Giltsoft mentions the use of filler, the document does not provide any teaching with regard to how much filler can be added to the composition to advantageously reduce the cost of the composition whilst still maintaining the properties of the PVA.

Similarly, neither document teaches appropriate ranges for the proportions of the other components in the composition taking into account the addition of a filler and the formation of the feedstock by cold pressing methods. For example, IE '280 suggests the use of 2-6% internal lubricant (Page 5 Lines 8-9) in the composition, but there is no teaching in either Giltsoft or IE '280 of how this should be altered by the addition of filler. In fact, it has been found that the use of less than 2.5% internal lubricant, and preferably less than 1.5% internal lubricant, is particularly advantageous for a filled, cold-pressed composition since this proportion of lubricant is sufficient to render the final blend extrudable but prevents excess lubricant separating from the blend (as discussed on Page 9 Lines 19-23 of the application).

Furthermore, neither IE '280 nor Giltsoft teaches or suggests a polymer feedstock in the form of a cold-pressed tablet or pellet.

In fact, the disclosure of Giltsoft teaches away from this method in Column 5 Lines 22-23 in which it is disclosed that the pellets are formed in the compounding stage by melt extrusion. This is a prior art method of pelleting the feedstock which is

referred to on Page 3 Lines 23-26 of the application and described in more detail in WO-A-98/26911, to which the present application refers. This method does not provide the advantages of the present invention since thermal degradation and variation in the properties of the plastics material are likely to arise from melting of the plastics material, as set out on Page 3 Lines 23-26 of the present application.

IE '280 also discloses compounding the composition as pellets using the prior art extrusion method (Page 8 Lines 13-15) and hence does not suggest cold-pressing the composition to form pellets without thermal degradation of the plastics material.

Therefore a combination of IE '280 and Giltsoft would not lead the skilled person to the invention claimed.

As acknowledged on Page 3 of the present application, WO-A-98/26911 discloses a technique of cold pressing, but the technique is applied only to unfilled PVA compositions. There is no teaching or suggestion in the document that this technique might be applied to a filled composition and no teaching of how this might be done. In particular, the document does not disclose suitable ranges of the proportions of PVA, filler, plasticiser and lubricant components that may be used in a filled composition that would work in conjunction with the cold pressing technique described.

Hence, none of the prior art documents disclose or suggest the compositions claimed in the present invention or the formation of such compositions into feedstock in the form of pellets using a cold-pressing technique. Hence it is submitted

that Claims 94-116 are not disclosed or suggested by the prior art documents and the claims are allowable over these documents.

The dependent claims are not discussed in detail here but, for the avoidance of doubt, it is noted that the dependent claims add further novel and inventive features over the prior art.

Accordingly, it is submitted that the application as amended is now in condition for allowance. A Notice of Allowance is respectfully solicited.

Favorable action on this application is respectfully requested.

Respectfully submitted,

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